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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/596,287	06/15/2000	Robert D. Kostadina	8788-000004	1374

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CHICAGO, IL 60611

EXAMINER

TO, TUAN C

ART UNIT	PAPER NUMBER
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3663

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/596,287

Applicant(s)

KOSTADINA, ROBERT D.

Examiner

Tuan C To

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,10,12,14,16,19-22 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7,9,10 and 22 is/are allowed.
- 6) ☒ Claim(s) 12,14,16,19 and 24-29 is/are rejected.
- 7) ☒ Claim(s) 20,21,28 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiwatashi (US 6094614A) and in view of Matsuno (US 6163747A).

Claim 12: The primary reference to Hiwatashi has been cited as basically disclosing the vehicle control system as claimed, including a plurality of control such systems such as an anti-lock brake system, a traction control system, and a stability system. In Hiwatashi's, the control unit 90 (Figure 1) is also disclosed as associated with mentioned systems. Furthermore, Hiwatashi teaches a road coefficient estimating means for estimating a road friction coefficient. It is noted that the control unit 90 is coupled to all sub-systems mentioned above to produce a control signal in response to the input signal from the coefficient estimating means. One thing that is not disclosed in Hiwatashi is the weather signal, which is manually inputted by a vehicle operator. The secondary to Matsuno is provided for disclosing the missing feature from Hiwatashi. In

fact, Matsuno shows a wiper switch 8 as a device used by a user who manually turns the switch on or off dependent on the condition of the exterior condition of the vehicle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Hiwatashi to include the teaching of Matsuno in order to make the windshield clear when there is a heavy raining or a snow.

Claim 24: Hiwatashi discloses the air temperature sensor 34 and the wheel speed sensors coupled to the vehicle as claimed.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiwatashi (US 6094614A), Matsuno (US 6163747A), and further in view of Breed et al. (US 6370475B1).

Neither Hiwatashi nor Matsuno discloses that the position signal is received from one or more global positioning satellites. Breed et al. has been cited as disclosing a vehicular system and method preventing vehicle accidents in which the position of the vehicle is determined, wherein said the position information is determined from the unit 44 (see figure 7). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the system of Hiwatashi, Matsuno, and Breed et al. to accurately locate the position of the vehicle at a specific region when the driver is getting lost caused by the tough weather condition, for example a heavy rain or strong wind.

Claims 16, 19, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiwatashi (US 6094614A), and in view of Breed et al. (US 6370475B1) and Matsuno (US 6163747A).

Claim 16: As mentioned in the preceding paragraphs, Hiwatashi teaches all limitation of claims 16 except for the following: providing a database of various roads, including data on road surface type, and determining the road surface type, inputting a weather signal indicative of a proximate weather condition. Breed et al. has been cited as teaching the navigation system 306 that includes a map database for storing the map related data such as roads, road segments etc. In addition, Breed et al. disclose the vehicle position determining means for accurately determine the position of the vehicle. Matsuno discloses a wiper switch 8 as a device used by a user who manually turns the switch on or off dependent on the condition of the exterior condition of the vehicle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the system of Hiwatashi, Breed et al., and Matsuno so that the driver is able to find an optimum road that is nearest to the current position of the vehicle using the navigation device mounted inside the vehicle. Additionally, the driver can turn the wiper on when there is a rain.

Claim 19: Matsuno discloses that the vehicle speed sensor 4 detects the speed of the vehicle.

Claim 25: In claim 25, the recitation "the step of inputting a weather signal includes manually inputting information indicative of the weather" has been discussed in the Matsuno reference.

Claim 26: It is well known in the art, the broadcast radio transmission can deliver the weather information to the driver.

Claim 27: Hiwatashi discloses the air temperature sensor 34 and the wheel speed sensors coupled to the vehicle as claimed.

Allowable Subject Matter

As indicated in the previous office action, claims 1-7, 9, 10, and 22 are in a condition of allowance.

Claims 20, 21, 28 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

Applicant's arguments filed on 10, with respect to the rejection(s) of claim(s) 12, 14, 16, 19, and 24-27 under 35 U.S.C 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hiwatashi (US 6094614) and Matsuno (US 6163747).

Applicant's arguments filed 10/29/2003 have been fully considered but they are not persuasive. In the remarks, the applicant stated that claims 12 and 16 are directed towards an apparatus and method for controlling a vehicle, which utilize a database of various roads that includes data on road surface type (i.e. pavement, asphalt, gravel, etc). A weather signal is utilized that is indicative of a proximate weather condition. A controller generates a control signal that includes a road surface condition that is base on the road surface type and the proximate weather condition. And then the applicant concludes those elements are not met by the prior art. The examiner has recognized

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the combination of Hiwatashi, Matsuno, and Breed et al would addresses all the features as claimed. The positive reason is the reference to Breed et al. teaches the GPS system and accurate map database, wherein the GPS system determines the current position of the vehicle and said accurate map database storing the database of various roads, including the data on road surface type. The control unit 90 coupled to the various subsystem such as the anti-lock brake system, the traction control system, and the stability system, and particularly the air temperature sensor which senses the outside temperature. It is persuasive to combine the Hiwatashi, Matsuno and Breed et al. in order to meet all the elements as claimed either in claim 12 or 16.

Claims 12, 14, 16, 19, and 24-29 are still rejected.

According to the amendment filed on 06/16/2003, the claims 11 and claim 15 are cancelled. However, they are now amended in the applicant's response filed on 10/29/2003. Appropriate correction is required.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (703) 308-6273. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and none for After Final communications.

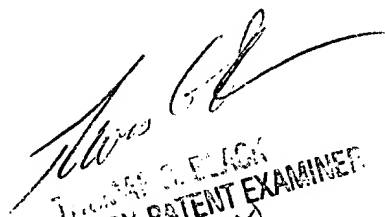
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

/tc

January 6, 2004


THOMAS G. ELICK
SUPERVISORY PATENT EXAMINER
GROUP 3663